



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,581	11/24/2003	Obada Kayali	GRIFF-44923	5795
26252	7590	03/29/2006	EXAMINER	
KELLY LOWRY & KELLEY, LLP 6320 CANOGA AVENUE SUITE 1650 WOODLAND HILLS, CA 91367			MARCANTONI, PAUL D	
			ART UNIT	PAPER NUMBER
			1755	

DATE MAILED: 03/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/721,581

Applicant(s)

KAYALI ET AL.

Examiner

Paul Marcantoni

Art Unit

1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/10/05 response to restriction.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 20-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-22 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1755

Applicant's election with traverse of Group I, claims 1-19, drawn to the method of forming a shaped article from fly ash in the reply filed on 11/10/05 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). The requirement is still deemed proper and is therefore made FINAL.

Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention.

The term "desired" is indefinite in claim 1. Applicants may simply amend the claim to --shaping a green article from the fly ash dough--- to resolve this issue.

Claim 3 is vague because applicants do not particularly point out and distinctly claim how they cure the shaped article. Is it simply air cooling and drying or is it oven or heated drying of the shaped article?

The terms "low to moderate" are indefinite in claim 5. What does this mean?

The term "preferably" is indefinite in claim 6.

The term "elevated" with reference to humidity in claim 8 is indefinite. What is the specific numerical range applicants consider an "elevated" humidity?

\

Obviousness Type Double Patenting:

Claims 1-19 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-23 of U.S. Patent No. 6,802,896 B2 (Kayali et al.). Although the conflicting claims are not identical, they are not patentably distinct from each other because both teach a process for forming a shaped article by mixing fly ash with water, molding the mixture, drying and firing by sintering (see claims).

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Art Unit: 1755

35 USC 103:

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Friedman '831, Ban '101, Foster '245, Brown '565, Golitz et al. '079, Talmy et al. '132, Kobayashi et al. '330, Xia et al. (CN 1123781 abstract), CN 1252393 (Zhang et al. abstract only), Du et al. (CN 1268495 abstract only), Wei et al. (CN 1398813-abstract only), or Widaj (PL 129013-abstract only).

Friedman '831 teaches mixing fly ash and water, shaping to form a pellet, drying the pellet (molded article), and heating and then sintering the pellet. Although Friedman do not teach the exact amounts or range of amounts of components, overlapping ranges would have been prima facie obvious to one of ordinary skill in the art (see claims in cols. 9-10).

Ban '101 et al. teach making a shaped article comprising fly ash by forming pellets by mixing with water, drying, and sintering (see for example claim 6 in col.6). Although Ban do not teach the exact amounts or range of amounts of components, overlapping ranges would have been prima facie obvious to one of ordinary skill in the art

Foster teaches forming a shaped fly ash article by mixing fly ash, water, and ceramic binder phase material, forming into green ware article (drying), and firing.

Art Unit: 1755

Although Foster do not teach the exact amounts or range of amounts of components, overlapping ranges would have been prima facie obvious to one of ordinary skill in the art. Further, applicants use of comprising language for their mixture is inclusive of fly ash, water, and potentially other components outside the scope of their invention such as ceramic binder phase material. Had applicants used consisting of to limit their mixture to fly ash, water, and plasticizer in their independent claim, this would exclude all other potential components. Applicants should consider insertion of "plasticizer" into independent claim 1 as well to eliminate potentially intervening references.

Brown teaches a process for making a ceramic article by mixing fly ash, slag, and water (see claim 6 in col.14) followed by shaping, drying, and firing. Applicants again may consider limiting their mixture to only fly ash, water, and plasticizer to avoid overlapping references.

Golitz et al. '079 teach mixing fly ash, glass, clay binder, and water, shaping, drying, and later firing to form a ceramic product. Again, the applicants do not limit their mixture to a starting raw material mixture of fly ash, water, and plasticizer. Thus, it is inclusive of other components such as clay and glass. Applicants did not use consisting of claim language to exclude clay and glass and thus their invention is still inclusive of other components outside their invention. Comprising leaves the claim open for the inclusion of unspecified ingredients even in major amounts. Ex parte Davis et al., 80 USPQ 448 (PTO Bd of App.1948).

Talmy et al. '132 teach mixing fly ash, water, flux (sodium tetraborate), drying and heating or sintering (see claims). Again, Talmy does teach flux not taught by

Art Unit: 1755

applicants but applicants do not use consisting of claim language limiting their starting mixture to fly ash, water, and plasticizer. It is thus inclusive of flux and other components not contemplated by applicants' for their invention.

Kobayashi et al. '330 teach a process for making a granule (a shaped article) by mixing with coal ash (ie fly ash), hydraulic material (cement powder), and water, curing (drying), and heating in the range claimed by applicants for their invention (see claims). Again, applicants use comprising claim language for their mixture so it is inclusive of cement powder. Had applicants used a mixture consisting of fly ash, plasticizer, and water in claim 1, this reference would no longer apply in the rejection.

Xia et al. (CN 1123781 abstract only) teach making hollow bricks by mixing fly ash, shale powder, saw powder, and water, drying, and sintering at 950 to 1100 C. Overlapping ranges of amounts would have been prima facie obvious to one of ordinary skill in the art. Again, applicants use comprising language for their starting mixture which is inclusive of shale powder and saw powder.

Zhang et al. (CN 1252393 abstract only) teach mixing fly ash, bentonite, aggregate, and water, drying, and sintering at 1050 to 1200 C. Overlapping ranges of amounts would have been prima facie obvious to one of ordinary skill in the art. Again, applicants use comprising claim language which allows for the addition of bentonite.

Du et al. (CN 1268495 abstract only) teach mixing clay, fly ash, and water, molding, drying, and sintering in a range claimed by applicants for their invention. Overlapping ranges of amounts would have been prima facie obvious to one of ordinary

Art Unit: 1755

skill in the art. Again, applicants use comprising claim language which allows for the addition of clay.

Wei et al. (CN 1398813 abstract only) teach making a brick by mixing fly ash, bentonite, additive, and water, molding, drying, and sintering. Overlapping ranges of amounts would have been prima facie obvious to one of ordinary skill in the art. Again, applicants use comprising claim language which allows for the addition of bentonite and other modifying additives.

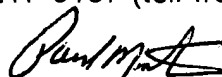
Widaj et al. (PL 129013 abstract only) teach making a ceramic material by mixing fly ash, clay, *plasticizer*, and water, molding into a granule (shaped article), drying, and firing. Overlapping ranges of amounts would have been prima facie obvious to one of ordinary skill in the art. Again, applicants use comprising claim language which allows for the addition of clay.

Relevant Art Cited by Applicants on their PTO-1449:

KR 9311260B1 (Park), ZA 9509833 A (Bablicky), CN 1260336 (Wang Fengnian et al.), and CN 1268495 (Lu Zhenqing et al.) all could have been applied as a reference in the rejection above. It is respectfully requested applicants amend their claim to overcome these overlapping prior art references.

Art Unit: 1755

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Marcantoni whose telephone number is 571-272-1373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Paul Marcantoni
Primary Examiner
Art Unit 1755